

What is claimed is:

1. A CD changer comprising, in combination,
a storage unit for supporting a collection of CDs in one or more vertical stacks,
a CD player comprising a housing and an movable CD access tray for
transporting an individual CD between an operating location inside said housing and an
extended location external to said housing,
a lifting mechanism for moving said individual CD between said extended
location and a transfer location positioned above said extended location, and
a horizontal transport for moving said individual CD between said transfer
location and a selected storage location within one of said stacks.
2. A CD changer as set forth in claim 1 wherein said transfer location is defined
by a vertically movable disk carrier including vertical drive means for positioning said
disk carrier at the same vertical level as said given storage level within one of said stacks.
3. A CD changer as set forth in claim 2 wherein said vertical transport comprises
a CD lifting mechanism for lifting said individual CD from said extended location on said
access tray to a position above said transfer location and then dropping said individual
CD onto said disk carrier at said second transfer location.
4. A CD changer as set forth in claim 2 wherein said vertical transport comprises
a CD lifting mechanism for lifting said individual CD from said transfer location defined
by said disk carrier to a position above said transfer location and then dropping said
individual CD through said second transfer location onto said access tray at said extended
location.

5. A CD changer comprising, in combination,
a CD player comprising a housing and an movable CD access tray for moving an individual CD between an operating location inside said housing and an extended location external to said housing,
a lifting mechanism for moving an individual CD between said extended location and a transfer location positioned above said extended location, and
a disk storage unit for comprising, in combination:
one or more vertical arrays of disk storage shelves for supporting compact disks,
and
a disk transport mechanism including a disk carrier for moving said individual CD between said transfer location and a selected one of said disk storage shelves.

6. A CD changer as set forth in claim 5 wherein said disk transport means comprises a mechanism for transporting said individual CD vertically between said transfer location and an intermediate location horizontally aligned with said selected one of said shelves and for transporting said individual CD horizontally between said intermediate position and said selected one of said shelves.

7. A CD changer as set forth in claim 5 wherein CD lifting mechanism moves said individual CD from said extended location to transfer location by lifting said CD above said transfer location and then dropping said individual CD onto disk carrier at said transfer location.

8. A CD changer as set forth in claim 7 wherein CD lifting mechanism moves said individual CD from said transfer location to said extended location by lifting said CD from said disk carrier at said transfer location to a position above said transfer location and then dropping said individual CD onto said access tray at said extended location.

9. A CD changer as set forth in claim 7 wherein said CD lifting mechanism comprises a set of scissor action levers driven at their lower end by an electric motor that separates and brings together said levers to lower and raise said lifting mechanism.

10. A CD changer as set forth in claim 7 wherein a frustoconical member at the top of said said lifting mechanism engages with and aligns the center opening of said individual CD.

11. A CD changer as set forth in claim 6 wherein said mechanism for transporting said individual CD vertically includes a two speed drive mechanism for first moving said individual CD rapidly to approximately a desired vertical level and then moving said individual CD at a slower rate to said intermediate location horizontally aligned with one of said shelves.